

TITLE OF THE INVENTION:

PURGEABLE CONTAINER FOR LOW VAPOR PRESSURE CHEMICALS

CROSS REFERENCE TO RELATED PATENT APPLICATIONS

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5/28/05
- [0001] The present patent application is a continuation-in-part of allowed US Patent
now Patent No. 6,648,034
5 Application Serial No. 10/155,726, filed 23 May 2002

BACKGROUND OF THE INVENTION

[0002] The present invention relates to a low dead space easily cleaned manifold for
detaching a container of a chemical delivery system, and in particular to an apparatus for
10 delivering high-purity or ultra-high purity chemicals to a use point, such as a
semiconductor fabrication facility or tool(s) for chemical deposition. Although the
invention may have other applications, it is particularly applicable in semiconductor
fabrication.

[0003] Semiconductor manufacturers require chemicals having at least a high-purity for
15 production processes to avoid defects in the fabrication of semiconductor devices. The
chemicals used in the fabrication of integrated circuits usually must have an ultra-high
purity to allow satisfactory process yields. As integrated circuits have decreased in size,
there has been an increase in the need to maintain the purity of source chemicals.

[0004] One ultra-high purity chemical used in the fabrication of integrated circuits is
20 tetrakis(dimethylamido)titanium (TDMAT). TDMAT is used widely in integrated circuit